A NEW GENUS OF COLLEMBOLA (NEANURIDAE:NEANURINAE) FROM SOUTHERN NEW ZEALAND

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Abstract. A new genus and species, Zelandanura bituberculata is described. It is recorded from Campbell Island south of New Zealand. This genus and Australonura Cassagnau, 1980 form a distinct southern hemisphere line within the Neanurinae.

Résumé. Une nouvelle espèce appartenant à un nouveau genre, Zelandanura bituberculata, est décrite dans ce travail. Ce genre et Australonura Cassagnau, 1980 forment une lignée particulière à l'hémisphère austral au sein des Neanurinae.

Specimens previously recorded from Campbell Island, south of New Zealand, are now found to be an undescribed species.

Genus Zelandanura gen. n.

Blue pigment absent, animal white in alcohol. Ant.III organ complete (5s-setae). Ant.IV with s1 to s8 subequal and apical vesicle entire. Eyes 2+2, without dark pigment. Labrum chaetotaxy: 0/2,4. Maxilla styliform. Mandible slender, with 2-3 teeth. All dorsal tubercles present, with reticulations and medium sized tertiary granulation.

Dorsal tubercles distributed as follows. Head. 7 tubercles: Cl,(Af+2Oc), (Di+Di), 2De, 2 (L+D1+So). Tergites. All tubercles separated on Th.I-Abd.III. On Abd.IV, Di fused together mid-dorsally; De, Dl and L separated. On Abd.V, (Di+De+Dl) fused together. On Abd. VI, tubercles fused together mid-dorsally.

Clothing not plurichaetotic. S-setae present in standard number and arrangement, 2+ms, 2/1,1,1,1 on each half tergite from Th. II to Abd. V. Claw without inner tooth.

Type species. Zelandanura bituberculata sp.n.

Zelandanura bituberculata sp.n.

Length 1.3 — 1.9 mm. Habitus contracted, slightly convex. Tertiary granulations medium-sized; reticulations obvious. Long macrochaetae thick, smooth, strongly clavate. Ant.III guard setae of normal size as are s1 to s8 of Ant.IV. Apical vesicle of Ant.IV entire. Labrum elongated, with ventro-distal sclerotisation arcuate. Chaetotaxy and tubercles as in Table 1 and Fig.1. All setae within tubercles, except Di3 on Th.III and sometimes on Th.II. Claw without internal tooth. M-seta absent on tibiotarsus.

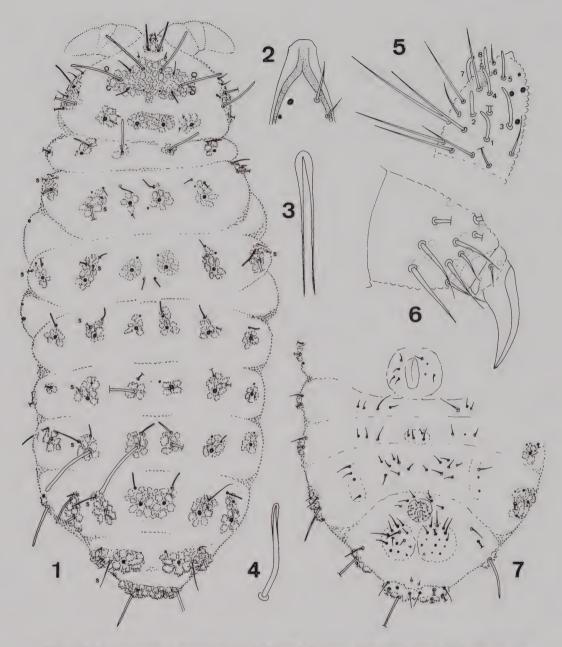
Holytype. Campbell I. Tucker Cove, under timber, 28.II.1963, K.A.J. Wise (deposited in Auckland Museum, Auckland).

Paratypes. Seven, same data as holotype (distributed in Bernice P. Bishop Museum, Honolulu, Université Paul Sabatier, Toulouse and Auckland Museum).

Table 1. Chaetotaxy of Zelandanura bituberculata sp.n.

Citacion	axy of th	ie nead							
Group of setae		Tubercle	Seta	Setae number		Kind of setae		Setae	
Cl*		+		4		Ml	F		
						me	C	ì	
Af+2Oc		+		14		MI		B,Ocm	
						Mc or me		,D,E,Oca	a,Ocp
Di+Di		+		2	M1		Γ	Dil	
De		+		3		MI		Del	
						Mc or me	Γ	Di2,De2	
Dl+L+So		+		>10		Ml		4	
						Mc or me	>	>6	
Chaetoto	axy of th	ne body a	and the leg	gs					
Chaetoto	axy of th	ne body a	and the leg	gs L	Sex2	Cx	Tr	F	Т
Chaetoto					Scx2	Cx	Tr	?	T
	Di 1 3	De	DI	L3			?	?	
Th.I	Di 1	De 2	DI I	L —	?	?	?	?	18
Th.I	Di 1 3 3 3 2	De 2 3+s	D1 1 3+s+ms 3+s 2	L3	?	? 7	?	?	18
Th.I II III	Di 1 3 3 3	De 2 3+s 3+s	D1 1 3+s+ms 3+s 2 2	3 3 3	? ? ? TV: 4	? 7	? ? ?	?	18
Th.I II III Abd.I	Di 1 3 3 3 2	De 2 3+s 3+s 2+s	D1 1 3+s+ms 3+s 2 2 2 2	3 3 3	? ? ? TV: 4 Ve: 4(? 7 ?8	? ? ?	? ? ?	18
Th.I II III Abd.I	Di 1 3 3 2 2 2	De 2 3+s 3+s 2+s 2+s	D1 1 3+s+ms 3+s 2 2	3 3 3	? ? ? TV: 4 Ve: 4(? 7 ?8 Ve1 presen 4me,Omi	? ? ?	? ? ?	18
Th.I II III Abd.I II	Di 1 3 3 3 2 2 2 2 2	De 2 3+s 3+s 2+s 2+s 2+s	D1 1 3+s+ms 3+s 2 2 2 2	3 3 3	? ? ? TV: 4 Ve: 4(Fu: 3-	? 7 ?8 Ve1 presen 4me,Omi	? ? ? t) Ve: 3-	? ? ?	18

^{*} Cl is fused with (Af+2Oc) in 1 specimen.



Figs. 1-7 Zelandanura tuberculata sp.n. 1. Dorsal. 2. Apex of labrum, dorsal. 3. Long clavate macrochaeta of Abd.III. 4. Short macrochaeta of Abd.III. 5. Ant. IV, dorsal. 6. Claw and tibiotarsus of leg I. 7. Abdomen, ventral.

Derivation. Zelandanura, New Zealand species without a furca; bituberculata refers to the fusion of tubercles into one tubercle on each side of Abd.V.

Zelandanura gen. n. and the genus Australonura Cassagnau, 1980 together constitute a southern hemisphere line characterised by the simple median tubercle (Di+Di) of the head. The two genera differ in the arrangement of tubercles on the posterior tergites. In Australonura, the tubercles Di of Abd. V are fused on the median dorsal line. In Zelandanura, however, the tubercles Di of Abd. V are separated at the median line and are fused laterally with De and Dl.

This species was previously recorded from Campbell Island by Wise (1964) as Neanura radiata Salmon, 1941. It is likely that the specimens were introduced from New Zealand. The original specimens recorded by Wise have been examined and are considered to be the present species. Z. bituberculata sp.n. differs from Crossodonthina radiata (Salmon, 1941) [= Neanura radiata] and other New Zealand Neanurinae species in the pattern of the tubercles and other characters.

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The opportunity to work on these Collembola, from the collections of the Bernice P. Bishop Museum, Honolulu, Hawaii, is appreciated.

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